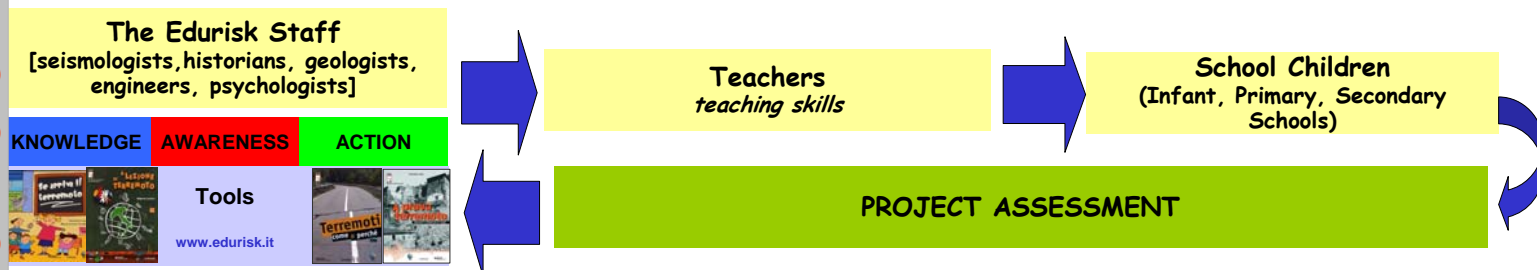


L'Aquila earthquake of April 6 2009: a turning point in the educational strategies for seismic risk reduction

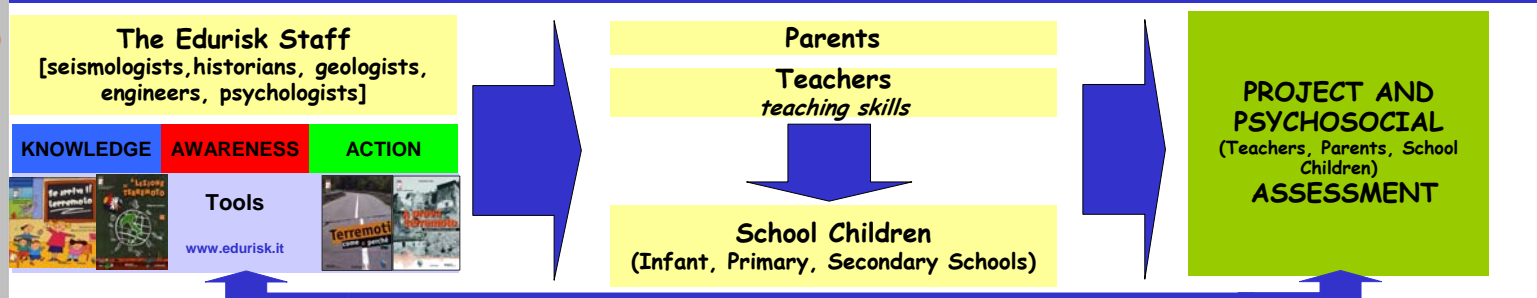
M.Crescimbeni¹, F.La Longa¹, R.Camassi², C.Nostro³, F.Bernardini², E.Ercolani², V.Castelli², M.L.Rossi⁴
¹INGV - AC Roma, ²INGV - Sect. Bologna, ³INGV - CNT Roma, ⁴Scurcola Marsicana AQ Civil Protection

This work compares the experience of the EDURISK Project (www.edurisk.it) educational program on risk reduction, achieved in the Abruzzo's schools before and after the L'Aquila (Abruzzo, Italy) earthquake of April 6 2009. In order to face the new emotional and cognitive needs of teachers and students, the project changed its methodology and contents.

EDURISK PROJECT METHODOLOGY IN "PEACETIME"



EDURISK PROJECT METHODOLOGY AFTER L'AQUILA EARTHQUAKE, APRIL 6 2009



CONTENTS IN "PEACETIME"

KNOWLEDGE <i>Scientific information</i>	AWARENESS <i>Behaviour and human values</i>	ACTION <i>Competencies and capabilities</i>
history, geology, physics, engineering, phenomenological approach	believes, fears, anxiety, confidence	seismic vulnerability reduction techniques, emergency plans, civil protection
1st module. General information on EDURISK Project: Principles, Goals, Methodology, Contents, Tools.	4th module. Earthquake and psychological effects. Emergency and psychological levels of prevention. Psychological reactions. What to do during and after an earthquake. The role of educators. Educational programs on emotions.	3rd module. Evaluation and risk reduction. Definition of risk (vulnerability, exposed value, hazard). Rules and actions to reduce risk. Civil Protection structure.
2nd module. Seismicity and Seismic hazard: General seismicity, theories, instrumental and historical data. Italian and local seismicity. Seismic hazard. Hazard maps.		

CONTENTS AFTER L'AQUILA EARTHQUAKE APRIL 6 2009

KNOWLEDGE <i>Scientific information</i>	AWARENESS <i>Behaviour and human values</i>	ACTION <i>Competencies and capabilities</i>
After L'Aquila earthquake, the borders among the three educational areas became reduced and the area of awareness seemed to be more important than the other two ones. The structure of training sessions and contents of the modules were adapted to specific local needs. The training sessions were reduced to a single day divided into 3 modules (geological and seismological topics, psychological and social topics, educational activities).		
1st module. General information on EDURISK Project: This module has been reduced to a short introduction. Proposals of educational activities were included in module 4.		
2nd module. Seismicity and Seismic hazard: This module has been redefined to meet the main sensitive issues emerged in the post earthquake: forecast, communication, hazard assessment, political and administrative responsibilities, policies for the risk reduction.		
3rd module. Evaluation and risk reduction. The contents of this module have been included in module 2, by adding a section on the safety of buildings after the earthquake.		
4th module. Earthquake and psychological effects. This module has been revised according to earthquake effects in several local areas and based on emotional needs of participants. Some topics both individually and collectively of great relevance have been added: memory and repressed memory, grieving process, risk perception, recovery and reconstruction activities.		

On the Left: Results of Edurisk Project evaluation conducted by Output EDURISK Project Questionnaire in November 2009.

On the Right: Preliminary results of the Post-Ante Questionnaire and Quality of Life Assessment (WHOQOL-Brief) conducted after April 6 2009 L'Aquila earthquake.

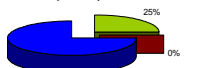
Output Edurisk Project Questionnaire

Results of Edurisk Project evaluation conducted by Output EDURISK Project Questionnaire on the teachers of the three schools that participated to the Edurisk Project from November 2008 until April 2009. The data show the effectiveness of the Edurisk project for the areas of Knowledge, Awareness and Action.

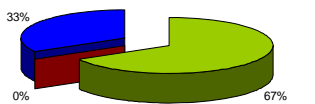
Knowledge acquired (Knowledge)



Skills acquired (Action)



Acquisition of risk culture (Awareness)

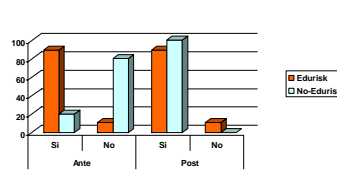


Post-Ante Earthquake Questionnaire

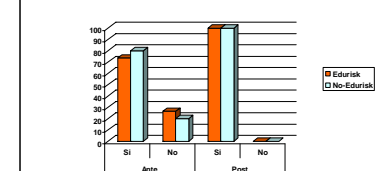
Item 17. Action for seismic risk reduction. EDURISK Project participants take actions to reduce risk both before and after the earthquake of April 6. Teachers who have not participated to the Edurisk project have taken no action to reduce risk before the earthquake but took actions only after the earthquake (emotional reaction).

Item 22. Answers show that, after the earthquake of April 6, all teachers would participate to aid campaigns in other affected areas.

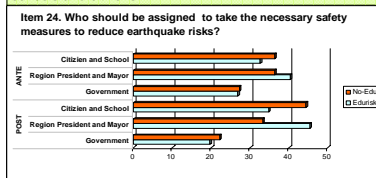
Item 17. Actions for seismic risk reduction



Item 22. Aid participation after an earthquake in other Italian regions



Item 24. The responses show a clear trend towards the attribution of responsibilities to the local authorities (mayor and president of the region) and greater involvement of schools and citizens.



Quality of Life Assessment (WHOQOL-Brief)

The brief version of Quality of Life Assessment was conducted in November 2009 after the earthquake.

Unfortunately, we haven't previous data on quality of life in this area. The retest will be carried out at the end of 2010.

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